

In the Claims

1. (currently amended) A method of managing a communication network partitioned into a plurality of subnetworks, each having one or more ports, for traffic services passing between the subnetworks, the method comprising the step of using a model of a given one of the subnetworks, and of its traffic services, modelled according to a predetermined multiplex layer protocol defining a number of layers of multiplexing, the model comprising an off-network pointer at a given one of the layers, for representing one of the ports, and representing a capability of the port for carrying, according to the multiplex layer protocol, given traffic services exiting the given subnetwork at the given port, and the step of using the predetermined multiplex layer protocol to deduce and model higher layers of functions off the given subnetwork, for the given traffic services, based on the off-network pointer, ~~and to determine those ports that represent valid termination points for trails, links and link connections in the subnetworks, whereby to generate trails interconnecting said termination points in different subnetworks.~~
2. (original) A method according to Claim 1, wherein the pointer is first generated in one of said layers and functionality at other layers is generated in response thereto.
3. (original) A method according to Claim 1, wherein the generation of said off-network pointer is performed by software.
4. (original) A method according to Claim 1, further comprising identifying incomplete trails within a said partition.
5. (cancelled)
6. (currently amended) A method according to Claim ~~[[5]]~~ 22, wherein the valid termination points for trails, links and link connections are first generated in one of said layers and functionality at other layers is generated in response thereto.
7. (currently amended) A method according to Claim ~~[[5]]~~ 22, wherein the generation of said valid termination points is performed by software.
8. (currently amended) A method according to Claim ~~[[5]]~~ 22, further comprising identifying incomplete trails within a said partition.
9. (cancelled)

10. (cancelled)
11. (currently amended) A network management system for a subnetwork of a communication network partitioned into a plurality of subnetworks, each having one or more ports, for traffic passing between the subnetworks, the management system having a model of the given subnetwork, and traffic services in the given subnetwork, modelled according to a predetermined multiplex layer protocol defining a number of layers of multiplexing, the model comprising an off-network pointer at a given one of the layers, for representing one of the ports, and representing a capability of the port for carrying according to the predetermined multiplex layer protocol, given traffic services exiting the subnetwork at the given port, and ~~to the system being arranged to use the predetermined multiplex layer protocol to deduce and model higher layers of functions off the subnetwork, for the given traffic services, based on the off-network pointer, and to determine those ports that represent valid termination points for trails, links and link connections in the subnetworks, whereby to generate trails interconnecting said termination points in different subnetworks.~~
12. (previously presented) The network management system of claim 11 and comprising means to determine those ports that represent valid termination points for trails, links and link connections in the subnetworks, whereby to generate trails interconnecting said termination points in different subnetworks.
13. (currently amended) A computer readable storage medium carrying software adapted to perform the method as claimed in Claim 1.
14. (cancelled).
15. (cancelled)
16. (cancelled)
17. (cancelled)
18. (cancelled)
19. (cancelled)
20. (cancelled)
21. (cancelled)
22. (new) The method of claim 1 comprising determining those ports that represent valid termination points for trails, links and link connections in the

subnetworks, and generating trails interconnecting said connection termination points in different subnetworks.